

# RM-95

## SERVICE MANUAL

*US Model  
Canadian Model  
AEP Model  
E Model*



### SPECIFICATIONS

#### Dimensions

Approx. 150 × 18 × 55 mm (w/h/d)  
(6 × 3/4 × 2 Inches)

not including clip

Weight Approx. 175 g (6 oz) including  
cable

#### Cable length

Approx. 5 m (16 feet 4 7/8 inches)

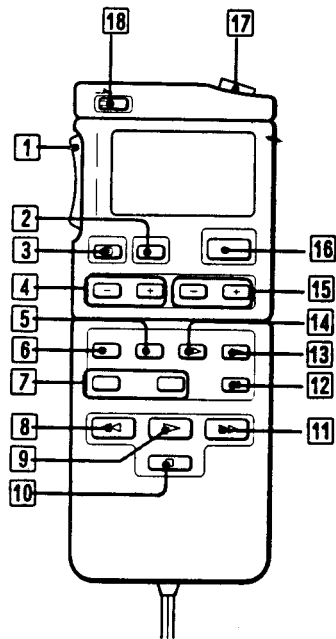
Design and specifications are subject to  
change without notice.



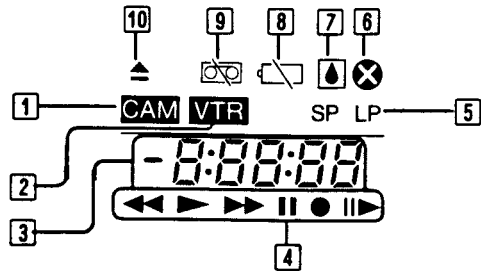
REMOTE COMMANDER  
**SONY**®

## SECTION 1 GENERAL

**A**



**B**



### Function of Controls A

These buttons function when the position of the power switch on the video camera recorder is set to:

CAMERA: ① - ⑧, ⑮ - ⑲

VTR(PLAYER): ⑤ - ⑭, ⑯, ⑳

#### ① ZOOM button

Press for smooth power zooming.

**TELE:** For telephoto position

**WIDE:** For wide-angle position

#### ② FOCUS button (When connected to CCD-V11 or CCD-V88/V88E only)

Press for auto focusing. For manual focusing, see ⑮.)

#### ③ [REVIEW] REC (recording) REVIEW button

When the recorder is set in the camera recording pause mode, press to play back the last few seconds of the recording on the viewfinder screen.

#### ④ EDIT SEARCH button

Press to search for the desired point when the recorder is set in the camera recording pause mode. The picture will appear on the viewfinder screen.

+: When pressed continuously, a playback picture will appear.

-: When pressed continuously, the picture will be played back in reverse.

When pressed and immediately released, it will function the same way as the [REVIEW] REC REVIEW button.

#### ⑤ DATA SCREEN button (When connected to CCD-V11 or CCD-V88/V88E only)

Press to display data on the TV screen.

#### ⑥ COUNTER RESET button

⑦ ● REC (record) buttons  
Press both buttons simultaneously to start recording when the POWER switch of the recorder is set to VTR.

#### ⑧ ◀◀ REW (rewind) button

Press to rewind the tape. Keeping this button pressed during playback enables you to see a high-speed playback in reverse.

#### ⑨ ▶▶ PLAY (playback) button

#### ⑩ ■ STOP button

#### ⑪ ▶▶▶ FF (fast forward) button

Press to advance the tape. Keeping this button pressed during playback enables you to see a high-speed playback.

#### ⑫ || PAUSE button

Press to stop the tape for a moment during recording or playback.

#### ⑬ |▶ SLOW button

Press to playback picture at 1/5 normal speed.

#### ⑭ ||| FRAME button

Press during playback when viewing still pictures frame-by-frame. Press again to go to the next frame.

#### ⑮ Manual focus buttons (When connected to CCD-V11 or CCD-V88/V88E only)

Use for manual focusing. Before adjusting, press the FOCUS button and make the ■ mark appear in the viewfinder of the camera.

⦿: to focus on near objects

▲: to focus on distant objects

#### ⑯ POWER button

Press to turn on the recorder. (Set the POWER switch of the recorder beforehand to CAMERA for recording, or VTR (PLAYER) for playback.) To turn the power off, press the button again.

#### ⑰ START/STOP button

Press to start or stop the camera recorder when the recorder is set in the camera recording pause mode.

#### ⑱ HOLD switch

When the Remote Commander is not in use, slide this switch in the direction of the arrow. The buttons of the Commander will not be operable even if they are pressed.

### Display window B

This displays the condition of the video camera recorder.

① Lights up when camera section is operable.

② Lights up when VCR section is operable.

③ Tape counter

④ Tape operation mode indication

◀◀ (rewind)/▶▶ (playback)/▶▶▶ (fast forward)/|| (pause)/● (record)/||| (frame-by-frame) or |▶ (slow)

⑤ Tape speed indicator

⑥ Blinks when heads are contaminated.

⑦ Blinks when there is condensation inside the unit.

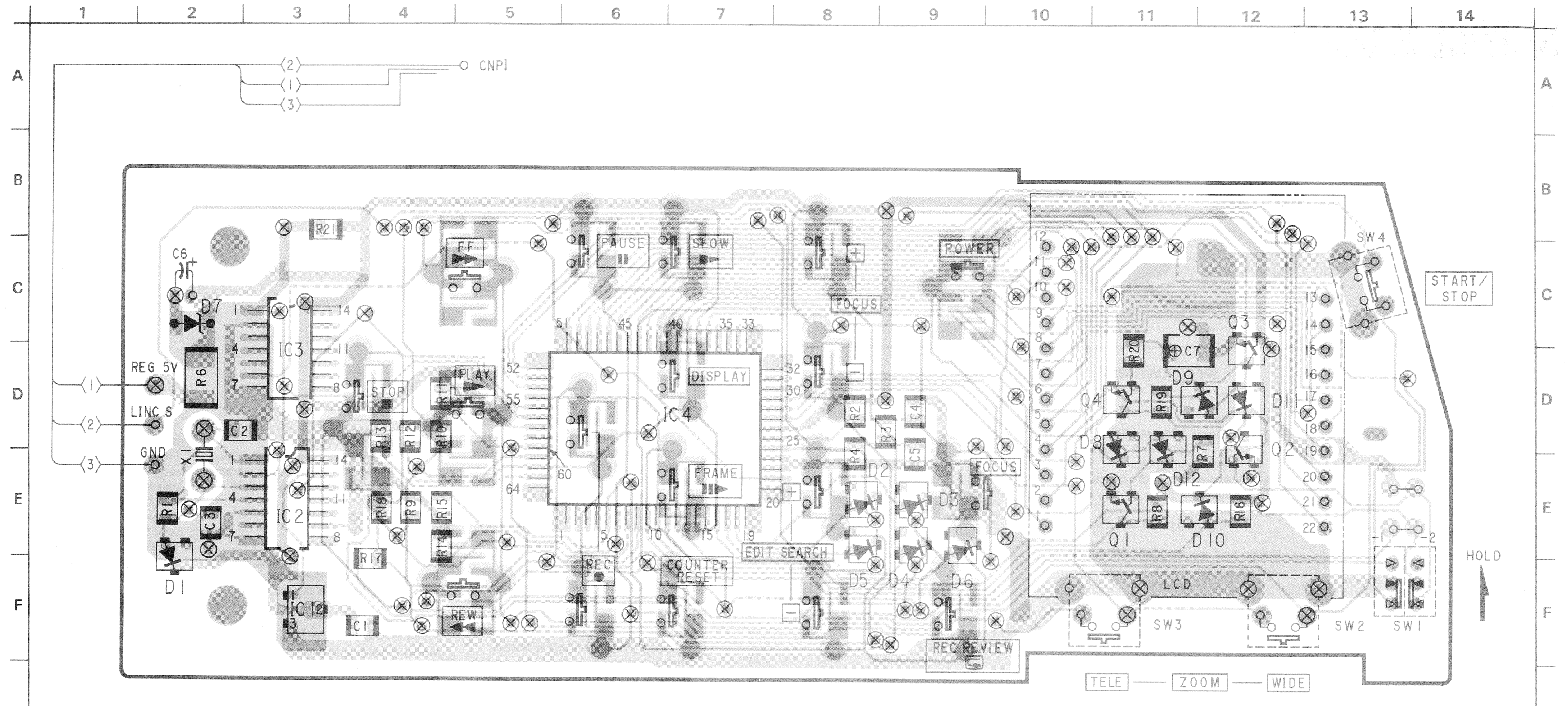
⑧ Blinks when the battery is exhausted.

⑨ Lights up when no cassette is inserted.

⑩ Blinks when there is condensation on the tape or the tape comes to its end during camera recording.

## SECTION 2 DIAGRAMS

### 2-1. PRINTED WIRING BOARDS

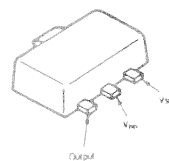


#### Note:

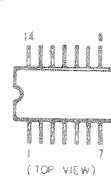
- — : indicates a lead wire mounted on the component side.
- ⊗ : Through hole.
- : soldering side.
- : component side.
- : Carbon pattern.

#### ● SEMICONDUCTOR LEAD LAYOUTS

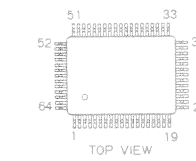
S-8054ALB



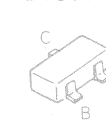
TC4024BF  
UPD4069UBG



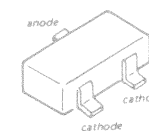
UPD7503G-A71-12



2SC1623  
DTC144WU



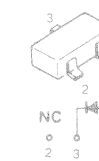
DAP202



RD5.1MB2

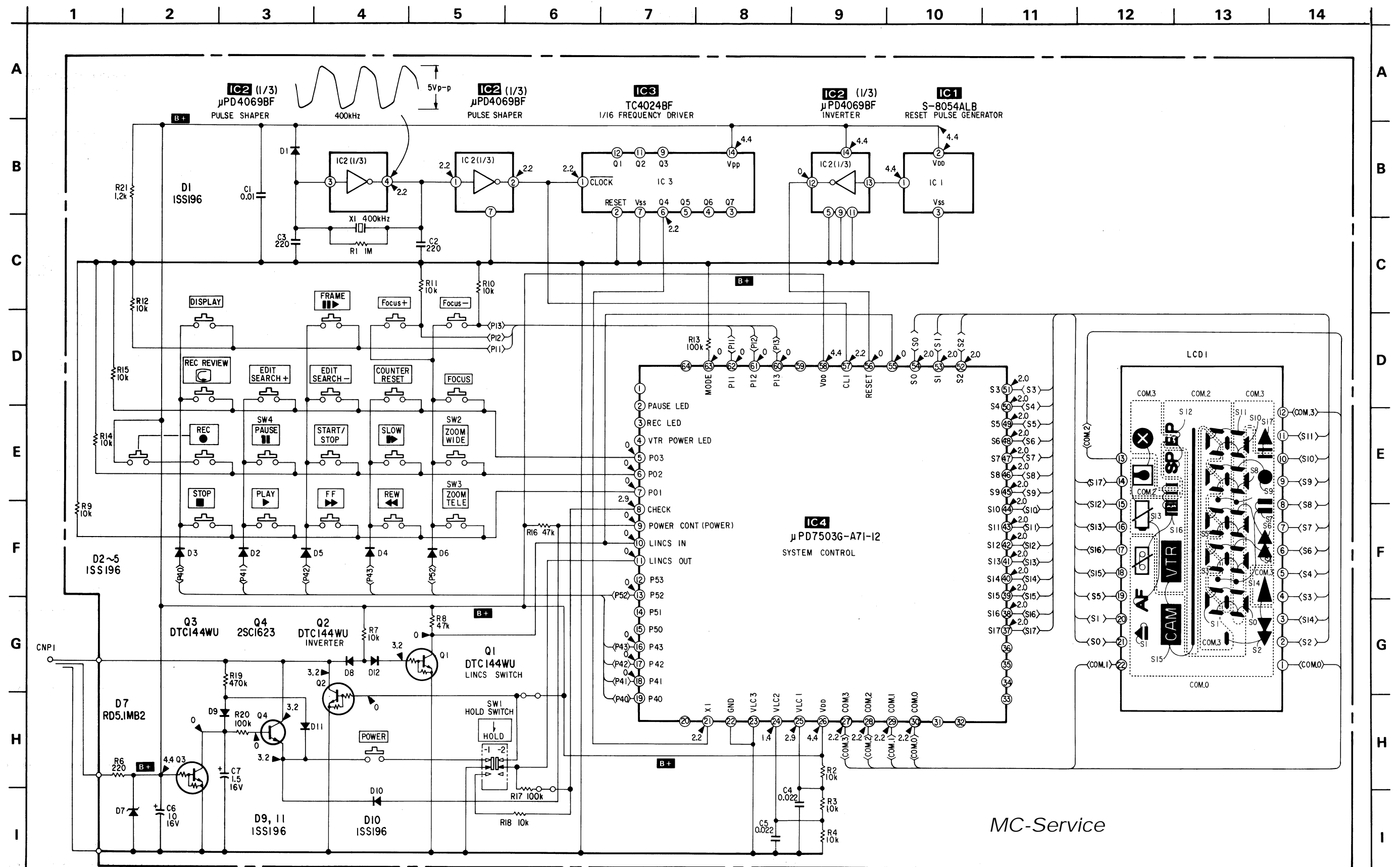


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# 2-2. SCHEMATIC DIAGRAM



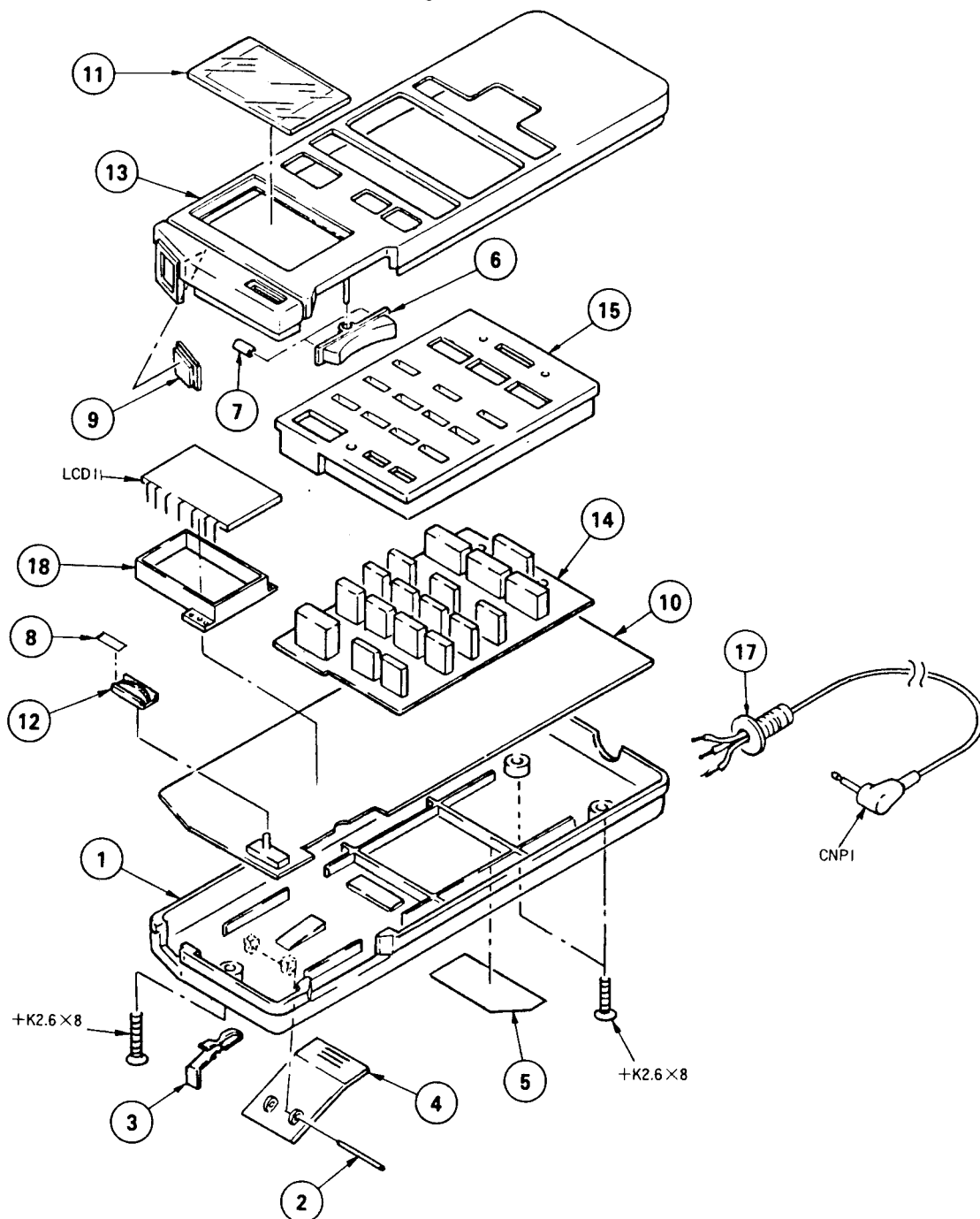
## Note:

- Caution when replacing chip parts.  
New parts must be attached after removal of chip.  
Be careful not to heat the minus side of tantalum capacitor, because it is damaged by the heat.
- All resistors are in ohms, 1/16W unless otherwise noted.  
kΩ: 1000Ω, MΩ: 1000kΩ.
- All capacitors are in μF unless otherwise noted. pF: μμF.  
50V or less are not indicated except for electrolytics and tantalums.
- : panel designation.
- B+ : B+ Line

## SECTION 3 EXPLODED VIEWS

### NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some differences from the original one.



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	*2-394-183-01	COVER, LOWER		10	*A-6766-308-A	RM-CA BOARD, COMPLETE	
2	2-199-003-00	SHAFT, CLIP		11	*2-389-368-01	COVER, LCD	
3	2-199-007-00	SPRING, CLIP		12	2-389-369-01	KNOB	
4	2-389-327-01	CLIP		13	2-394-184-01	COVER, UPPER	
5	*2-357-120-01	LABEL, MODEL NUMBER		14	2-394-182-01	RUBBER, SWITCH	
6	2-389-314-01	BUTTON, ZOOM		15	2-394-181-01	RETAINER, RUBBER	
7	9-911-839-99	CUSHION		17	2-357-251-01	BUSHING	
8	*2-389-364-01	PLATE, COLOR		18	2-394-180-01	SPACER, LCD	
9	2-389-365-01	KEY TOP (B)					

# SECTION 4 ELECTRICAL PARTS LIST

NOTE:

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- RESISTORS  
All resistors are in ohms  
METAL: Metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F: nonflammable
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- XX, -X mean standardized parts, so they may have some difference from the original one.
- SEMICONDUCTORS  
In each case, U:  $\mu$ , for example:  
UA.....:  $\mu$ A....., UPA.....:  $\mu$ PA.....,  
UPB.....:  $\mu$ PB....., UPC.....:  $\mu$ PC.....,  
UPD.....:  $\mu$ PD.....
- CAPACITORS  
MF:  $\mu$ F, PF:  $\mu$  $\mu$ F
- COILS  
MMH: mH, UH:  $\mu$ H

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
*A-6766-308-A	RM-CA BOARD, COMPLETE	*****		R007	1-216-833-11	METAL GLAZE 10K 5%	1/16W
2-357-251-01	BUSHING			R008	1-216-841-11	METAL GLAZE 47K 5%	1/16W
2-394-180-01	SPACER, LCD			R009	1-216-833-11	METAL GLAZE 10K 5%	1/16W
<u>CAPACITOR</u>				R010	1-216-833-11	METAL GLAZE 10K 5%	1/16W
C001	1-163-021-00	CERAMIC CHIP 0.01MF	10% 50V	R011	1-216-833-11	METAL GLAZE 10K 5%	1/16W
C002	1-163-125-00	CERAMIC CHIP 220PF	10% 50V	R012	1-216-833-11	METAL GLAZE 10K 5%	1/16W
C003	1-163-125-00	CERAMIC CHIP 220PF	10% 50V	R013	1-216-845-11	METAL GLAZE 100K 5%	1/16W
C004	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	R014	1-216-833-11	METAL GLAZE 10K 5%	1/16W
C005	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	R015	1-216-833-11	METAL GLAZE 10K 5%	1/16W
C006	1-126-157-11	ELECT 10MF	20% 16V	R016	1-216-841-11	METAL GLAZE 47K 5%	1/16W
C007	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	R017	1-216-845-11	METAL GLAZE 100K 5%	1/16W
<u>DIODE</u>				R018	1-216-833-11	METAL GLAZE 10K 5%	1/16W
D001	8-719-801-41	DIODE 1SS196		R019	1-216-853-11	METAL GLAZE 470K 5%	1/16W
D002	8-719-801-41	DIODE 1SS196		R020	1-216-845-11	METAL GLAZE 100K 5%	1/16W
D003	8-719-801-41	DIODE 1SS196		R021	1-216-822-11	METAL GLAZE 1.2K 5%	1/16W
D004	8-719-801-41	DIODE 1SS196		<u>SWITCH</u>			
D005	8-719-801-41	DIODE 1SS196		SW001	1-553-755-00	SWITCH, SLIDE (HOLD SW)	
D006	8-719-801-41	DIODE 1SS196		SW002	1-553-997-00	SWITCH, KEY BOARD (ZOOM WIDE)	
D007	8-719-105-82	RD5.1MB2		SW003	1-553-997-00	SWITCH, KEY BOARD (ZOOM TELE)	
D008	8-719-914-44	DAP202		SW004	1-553-997-00	SWITCH, KEY BOARD (START/STOP)	
D009	8-719-801-41	DIODE 1SS196		<u>CRYSTAL</u>			
D010	8-719-801-41	DIODE 1SS196		X001	1-527-532-00	OSCILLATOR, CERAMIC (400KHz)	
D011	8-719-801-41	DIODE 1SS196		*****			
<u>IC</u>				<u>MISCELLANEOUS</u>			
IC001	8-759-913-41	IC S-8054ALB		*****			
IC002	8-759-106-26	UPD4069URG		CNP1	1-574-052-21	CORD, CONNECTION	
IC003	8-759-204-20	TC4024BF		*****			
IC004	8-759-142-56	IC UPD7503G-A71-12		<u>ACCESSORI</u>			
<u>LCD</u>				*****			
LCD1	1-808-617-11	LCD. DISPLAY		3-786-496-11 MANUAL, INSTRUCTION			
<u>TRANSISTOR</u>				*****			
Q001	8-729-905-15	DTC144WU		<u>HARDWARE LIST</u>			
Q002	8-729-905-15	DTC144WU		*****			
Q003	8-729-905-15	DTC144WU		<u>SCREW</u>			
Q004	8-729-100-66	2SC1623		7-685-234-19 SCREW +KTP 2.6X8 TYPE2 SLIT			
<u>RESISTOR</u>				*****			
R001	1-216-857-11	METAL GLAZE 1M 5%	1/16W				
R002	1-216-833-11	METAL GLAZE 10K 5%	1/16W				
R003	1-216-833-11	METAL GLAZE 10K 5%	1/16W				
R004	1-216-833-11	METAL GLAZE 10K 5%	1/16W				
R006	1-216-813-11	METAL GLAZE 220 5%	1/16W				

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Sony Corporation  
Personal Video Group

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